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Speaker's corner

Autism and diet

Is exposure to antibodies and fatty acids in mother's milk associated with development of autism? Autism is a disease of unknown aetiology, but complex pathogenesis that seems to have become more common in recent decades. We suggest that efforts exploring the aetiology of autism should pay special attention to patterns of breast and artificial feeding in infancy.

Newschaffer grouped the aetiology of risks for autistic disorders into four groups: genetic predisposition of the mother, environmental factors acting on the mother, genetic predisposition of the child, and environmental factors affecting the child.[1] Historical incidence has been difficult to determine as the heterogeneous nature of the syndrome and the recent increase in awareness confound past estimates.[2] However, it is estimated that autism has increased threefold since the 1970s and that current rates are around 5–10 cases per 10 000 in the general population.[1] If prevalence is increasing it implies that even if there is a genetic component we also need to look for some environmental change that could be triggering any increase in prevalence.

There are well identified links between gastrointestinal disease and symptomatic autism. Wakefield claimed that diarrhoea occurred disproportionately in a control study of autistic children.[3] Children with autism have unusual feeding patterns and in one study low appetite, narrow range of preferred dishes, and digestive autonomic nervous system reactions were significantly more common in the autistic group when compared with other children in one study.[4]

The postnatal growth of the human brain requires a range of fatty acids and the content of human milk changes with brain growth. By age 3 the brain of an autistic child undergoes a growth spurt and is larger than that of a normal child at age 3.[5] Tanoue and colleagues suggested that breast feeding may protect against autism. Researchers studied the weaning times of 145 autistic infants compared with a control group of 224 normal children. They found that the children in their control group breast fed significantly longer than the autistic infants. The researchers, who had previously found a correlation between incidence of autism and cyclical outbreaks of pneumonia and bronchiolitis, speculated that breast feeding lowered the risk of developing autism by protecting against pneumonia.[6] Those with autism may be more vulnerable to infection during the newborn period. The evidence of links between diet and autism are suggestive and warrant further investigation.

M Potts, B Bellows
School of Public Health, University of California, Berkeley, USA
Correspondence to: Mr B Bellows, 314 Warren Hall, Berkeley, CA 94720 USA; bbellows@berkeley.edu

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